

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

**LOK SABHA**  
**UNSTARRED QUESTION NO. 3761**  
TO BE ANSWERED ON 16/07/2019

**LINKAGE BETWEEN PRIVATE SEED INDUSTRY AND  
PUBLIC RESEARCH INSTITUTE**

3761. SHRI SRIRANGA APPA BARNE:  
DR. SHRIKANT EKNATH SHINDE:  
DR. PRITAM GOPINATHRAO MUNDE:

Will the Minister of AGRICULTURE AND FARMERS WELFARE  
कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) whether at present, the public sector is responsible for most valuable germplasm while private seed agencies concentrate on more remunerative high value seed segment, if so, the facts thereof;
- (b) whether clear protocols need to be developed for sharing precious germplasm with the private sector, if so, the response of the Government thereto;
- (c) whether there is a vast scope to expand linkages between the private seed industry and public research institutions to take advantages of the positive aspects of both the segments for the benefits of farmers;
- (d) if so, the steps taken by the Union Government to expand linkages between the private seed industry and public research institutions; and
- (e) the success achieved by the Government in this regard so far?

**A N S W E R**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE  
कृषि और किसान कल्याण मंत्री **(SHRI NARENDRA SINGH TOMAR)**

- (a) ICAR-National Bureau of Plant Genetic Resources (NBPGR) is responsible for conservation of most valuable germplasm in its Genebank. The NBPGR Genebank is the second largest Genebank in the world and only one of its kind in India with a total storage capacity of 2.0 million germplasm samples. As on June 30, 2019 the total germplasm holdings in the National Genebank is 4,41,728. NBPGR shares the germplasm for research purposes with public institutions, private seed companies, NGOs

and farmers. In general, private seed agencies are concentrating more on low volume high value crops. Public sector is working on both i.e. high volume low value crops and low volume high value crops.

(b) National Advisory Board on Management of Genetic Resources (NABMGR) is advisory body on development of protocols for sharing germplasm. Material Transfer Agreement (MTA) is already in place (revised during 2018) and being used routinely for sharing the precious germplasm within India compliant to extant national legislations with different agencies including private sector. ICAR- NBPGR is sharing germplasm with private sector since 2017 and a total of 460 samples have been shared with private seed companies until March, 2019.

(c) Yes, Public Private Partnership (PPP) mode is already in place for development and commercialization of crop varieties. The private seed companies are getting their research material (varieties) tested through All India Coordinated Research Projects of different crops and these varieties are being released and notified after testing at both public and private sector test locations.

(d) To take the advantages of positive aspects of both public and private sector segments for benefit of farmers, the Indian Council of Agricultural Research (ICAR) on the indents of Deptt. of Agriculture, Cooperation and Farmers Welfare (DAC&FW) is supplying the breeder seeds of all public sector bred varieties to the private seed agencies for further multiplications.

ICAR has taken steps to expand the linkages with private industries. Accordingly, Guidelines for Intellectual Property Management and Technology Transfer/Commercialization (Revised 2018); and ICAR Rules and Guidelines for Professional Service Functions (Training, Consultancy, Contract Research and Contract Service) have been developed and institutionalized. These guidelines establish policy for developing public private partnerships. Further, Agrinnovate India Ltd., a registered company has also been established by Department of Agricultural Research and Education (DARE) which aims to promote the development and spread of R&D outcomes by forging partnerships both in the country and outside for the public benefit.

Newly released public bred varieties are commercialized by Agrinnovate Ltd. and Zonal Technology Management and Business Planning and Development (ZTM&BPD) Units/ Institute Technology Management Units of ICAR Institutes and State Agricultural Universities to private sector through signing Memorandum of Agreement (MoA), where a nominal licensing fee is charged and breeder seed is provided.

(e) Breeder seed is being produced and supplied to private seed agencies as per the indents of DAC&FW. As a result, private seed sector is contributing to about 50% of quality seed available in the market.

More than 500 MoAs have been signed with private seed companies for licensing the varieties to seed companies for production and marketing the quality seed for timely availability of good quality seed at farmers door step, which in turn helps in increasing the productivity as well as farmers' income.

\*\*\*\*\*